

IN THE CLAIMS

1. (currently amended and withdrawn) A Simian Immunodeficiency Virus (SIV) genome having a mutation within the packaging signal such that viral RNA is not packaged within an SIV capsid, wherein the mutation comprises deletion of

(a) a sequence of SEQ ID NO:1, or

(b) a fragment thereof of 5 or more nucleotides in length, or

(c) a variant of either thereof.

2. (withdrawn) An SIV genome according to claim 1 wherein the genome has a deletion in the region between the primer binding site and the 5' major splice donor site.

3. (withdrawn) An SIV genome according to claim 1 wherein the genome comprises a mutation in the region between the 5' major splice donor size and the gag initiation codon.

4. (withdrawn) An SIV genome according to claim 1 wherein the genome has a mutation within the DIS structure.

Claim 5 (canceled)

6. (currently amended and withdrawn) A SIV genome according to claim 1 [[5]] wherein the deletion comprises nucleotides 53-85 of SEQ ID NO:1.

7. (currently amended) A viral vector comprising an SIV packaging signal and a heterologous gene capable of being expressed in the vector, wherein the SIV packaging signal is

(a) a sequence of SEQ ID NO:1;

(b) a fragment thereof of 10 or more nucleotides in length, or

(c) a variant of either thereof.

8. (currently amended) A vector according to claim 7 further comprising ~~the region between the primer binding site and the 5' major splice donor site, and/or the region~~ between the 5' major splice donor site and the gag initiation codon or a fragment of either thereof.

Claim 9 (canceled)

10. (currently amended) A vector according to claim 7 wherein the heterologous gene encodes a therapeutic protein or peptide, or an antigenic ~~antigen~~ protein or peptide.

Claim 11 (canceled)

12. (withdrawn) A virus produced by the method of claim 20.

13. (withdrawn) A pharmaceutical composition comprising a virus according to claim 12 and a pharmaceutically acceptable carrier.

14. (currently amended and withdrawn) An SIV packaging sequence or an antisense sequence thereto, ~~for use in the treatment or prophylaxis of SIV or HIV infection~~ wherein the SIV packaging signal comprises

(a) a sequence of SEQ ID NO:1, or

(b) a fragment thereof of 5 or more nucleotides in length, or

(c) a variant of either thereof.

15. (withdrawn) An SIV packaging sequence according to claim 14 comprising a sequence of 5 or more polynucleotides from a region of the SIV genome between the primer binding site and the major 5' splice donor.

Claim 16 (canceled)

17. (currently amended and withdrawn) A method of delivering a therapeutic or an antigenic protein or peptide to an individual comprising administering to the individual an effective amount of a virus according to claim 12.

18. (withdrawn) A method of treatment or prophylaxis of SIV or HIV infection comprising administering to an individual an effective amount of a SIV packaging sequence according to claim 14.

Claim 19 (canceled)

20. (currently amended and withdrawn) A process for producing a SIV virus encoding an heterologous gene, which process comprises infecting a host cell with a packaging defective SIV genome having a mutation in the packaging signal such that the viral RNA is not packaged within an SIV capsid and a viral vector comprising an SIV packaging signal and a heterologous gene capable of being expressed in the vector according to claim 7.

21. (withdrawn) A method according to claim 17, wherein the virus is formulated as a pharmaceutical composition with a pharmaceutically acceptable carrier.

22. (withdrawn) A method according to claim 18, wherein the packaging sequence comprises a sequence of 5 or more polynucleotides from a region of the SIV genome between the primer binding site and the major 5' splice donor.

23. (withdrawn) A method according to claim 18, wherein the packaging sequence comprises:

- (a) a sequence of SEQ ID NO:1, or
- (b) a fragment thereof of 5 or more nucleotides in length, or
- (c) a variant of either thereof.

24. (new) A vector according to claim 7 wherein the SIV packaging signal comprises the sequence of SEQ ID NO:1.

25. (new) A vector according to claim 24 further comprising the region between the 5' major splice donor site and the gag initiation codon or a fragment of either thereof.

26. (new) A vector according to claim 7 wherein the SIV packaging signal comprises nucleotides 53-85 of SEQ ID NO:1.